

ABSTRACT OF THE DISCLOSURE

The present invention discloses an optical transmission line constructing method comprising the steps of connecting a plurality of optical fibers differing from each other in terms of a transmission characteristic; making inspection light incident on an entrance end of the connected plurality of optical fibers; detecting, on the entrance end side, respective return light components of the inspection light occurring at individual positions of the plurality of optical fibers in its longitudinal direction; evaluating a characteristic information distribution of return light in the longitudinal direction of the plurality of optical fibers; and constructing an optical transmission line according to a result of the evaluation.